PN - JP2001236614 A 20010831

PD - 2001-08-31

PR - JP20000045477 20000223

OPD - 2000-02-23

TI - COMBINED MAGNETIC HEAD

IN - MIMA HIROYUKI;TORII ZENZO;FUJII SHIGEO;IFUKU TOSHIHIRO; MASUDA KENZO;MEGURO SATOSHI;MUTO KENJI

PA - HITACHI METALS LTD

IC - G11B5/39 ; G01R33/09 ; G11B5/31 ; H01L43/08



TI - Compound magnetic head for disc drive, has copper radiating fins extending from upper and lower magnetic shieldings of magneto resistance head on substrate

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PA - (HITK ) HITACHI METALS LTD

IC - G01R33/09 ;G11B5/31 ;G11B5/39 ;H01L43/08

AB - JP2001236614 NOVELTY - Giant magneto resistance effect head (2) and guidance head (3) are laminated over non-magnetic insulated substrate (1). Lower and upper magnetic shieldings (21,22) of head (2) separated by insulating layer (24), are laminated over the substrate. Copper radiating fins (26,27) extend from shieldings (21,22) respectively.

- USE - For disc drive.
- ADVANTAGE - Electrostatic destruction and electrostatic migration are prevented, as heat produced by giant magneto resistance effect head is eliminated with the provision of fins. Temperature rise of coil is prevented, as the heat generated in exciting coil of guidance head is discharged through the fin.
- DESCRIPTION OF DRAWING(S) - The figure shows a sectional view of compound magnetic head.
- Non-magnetic insulated substrate 1
- Giant magneto resistance effect head 2
- Guidance head 3
- Magnetic shieldings 21,22
- Insulating layer 24
- Copper radiating fins 26,27
- (Dwg.1/5)

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PA - HITACHI METALS LTD
TI - COMBINED MAGNETIC HEAD
AB - PROBLEM TO BE SOLVED: To provide a combined magnetic head having a huge magneto-resistive head and an inductive head layered on a non-magnetic insulating substrate used as a head slider, wherein the size of a lower magnetic shield or an upper magnetic shield (lower magnetic core) is reduced up to the size magnetically required to form a structure by which a heat radiating effect can be obtained.
- SOLUTION: The combined magnetic head has a structure wherein a heat radiating fin made of copper connected to the magnetic shield is provided at the position extended from at least one of the lower and upper magnetic shields of the huge magneto-resistive head.
SI - H01L43/08
I - G11B5/39 ;G01R33/09 ;G11B5/31